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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,666	02/04/2005	Jose De Jesus Pineda De Gyvez	NL 020835	8446

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS		
P.O. BOX 3001		
BRIARCLIFF MANOR, NY 10510		

EXAMINER	
TRA, ANH QUAN	

ART UNIT	PAPER NUMBER
2816	

MAIL DATE	DELIVERY MODE
05/18/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/523,666

Applicant(s)

PINEDA DE GYVEZ ET AL.

Examiner

Quan Tra

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 65 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-11 and 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-11 and 13-21 is/are allowed.
- 6) ☒ Claim(s) 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/16/07 has been entered. A new ground of rejection is introduced.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marr et al. (USP 6529421) in view of Sauer (USP 6002245) and Okamoto (USP 5070306).

As to claim 22, Marr et al.'s figure 20A shows a threshold control circuit, but does not show the detail of the bandgap voltage generator 2018 and the detail of comparator 2010. However, Okamoto's figure 3 shows a comparator circuit that improves gain (abstract) and Sauer's figure 2 shows a bandgap voltage generator with simple structure. Therefore, it would have been obvious to one having ordinary skill in the art to use Okamoto's comparator and Sauer's bandgap circuit for Marr et al.'s comparator and bandgap circuit for the purpose of improving the comparator's gain and saving space. Thus the modified Marr et al.'s figure 20A shows: a controller comprising a circuit unit including a first transistor (Marr's 2006), a reference transistor (Sauer's M3 in the modified 2018), and a bulk connection, wherein a terminal (VBG)

Art Unit: 2816

of the reference transistor has a reference voltage; a sensor circuit (Okamoto's figure 3 in the modified 2010 and 2008) including a sensor (Okamoto's circuit 9) configured to sense a threshold voltage of the first transistor and to compare the threshold voltage with the reference voltage to form a threshold voltage difference (at N11); and a comparator (Okamoto's QP11 and QN12) configured to compare the threshold voltage difference with the reference voltage; wherein an output of the comparator is connected to the bulk connection to form a control loop that changes at least one of the threshold voltages so that the threshold voltage difference is minimized.

As to claim 23, the modified Marr et al.'s figure 20A shows the terminal is a gate of the reference transistor (Sauer 's M3).

As to claim 24, the modified Marr et al.'s figure 20A shows that the reference circuit and the sensor circuit include a same number of transistors (4 transistors).

#### ***Allowable Subject Matter***

Claims 1, 3-11 and 13-21 are allowed.

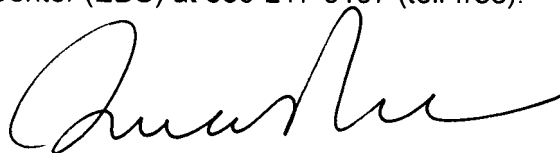
#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 571-272-1755. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Quan Tra', is positioned above the printed name.

QUAN TRA  
PRIMARY EXAMINER  
ART UNIT 2816

May 15, 2007